

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS F O Box 1450 Alexandria, Virginia 23313-1450 www.mpile.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,189	12/07/2000	Robert Miller	IBM/151	1431
26517 7590 077272099 WOOD, HERRON & EVANS, L.L.P. (IBM) 2700 CAREW TOWER			EXAMINER	
			EL CHANTI, HUSSEIN A	
441 VINE STREET CINCINNATI, OH 45202		ART UNIT	PAPER NUMBER	
			2457	
			MAIL DATE 07/27/2009	DELIVERY MODE PAPER

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

#### UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte ROBERT MILLER

Appeal 2008-005207 Application 09/732,189<sup>1</sup> Technology Center 2400

Decided: 2 July 27, 2009

Before LANCE LEONARD BARRY, HOWARD B. BLANKENSHIP, and CAROLYN D. THOMAS, *Administrative Patent Judges*.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

<sup>&</sup>lt;sup>1</sup> Application filed December 07, 2000. The real party in interest is International Business Machines Corporation.

<sup>&</sup>lt;sup>2</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

#### I. STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C.  $\S$  134(a) from a final rejection of claims 1-26 mailed September 20, 2005, which are all the claims remaining in the application. We have jurisdiction under 35 U.S.C.  $\S$  6(b).

We reverse but enter new grounds of rejection as to claims 23-26.

#### A. INVENTION

Appellant invented a system, method, and program product for locally tracking protocol progress information within each member of a group in a clustered computer system that is capable of identifying at least one problematic member of the group. By locally tracking such information, any member of the group may be directed to provide such information on demand in response to a query directed to such member. (Spec., Abstract.)

#### B. ILLUSTRATIVE CLAIM

The appeal contains claims 1-26. Claims 1, 14, 22, 23, and 25 are independent claims. Claims 1, 23, and 25 are illustrative:

- 1. A method of determining a status of a peer protocol initiated on a plurality of members of a group in a clustered computer system, the method comprising:
- (a) locally tracking protocol progress information for a peer protocol within each of a plurality of members collectively managed as a group by a clustered computer system, wherein the peer protocol is of the type wherein each member of the group receives a message associated with the peer protocol and returns an acknowledgment in association with locally processing the peer protocol; and

(b) responding to a query directed to a selected member of the group by providing the protocol progress information locally tracked by the selected member, wherein the query comprises a request for the protocol progress information.

# 23. A program product, comprising:

- (a) a program configured to determine a status of a peer protocol initiated on a plurality of members that are collectively managed as a group by a clustered computer system by locally tracking protocol progress information within at least one member of the group, and providing the protocol progress information locally tracked by a member of the group in response to a query directed to such member, wherein the peer protocol is of the type wherein each member of the group receives a message associated with the peer protocol and returns an acknowledgment in association with locally processing the peer protocol, and wherein the query comprises a request for the protocol progress information; and
  - (b) a signal bearing medium bearing the program.

# 25. An apparatus, comprising:

- (a) a memory; and
- (b) a program, resident in the memory, the program configures to monitor for receipt of a query message that request protocol status information by a member among a plurality of members that are collectively managed as a group by a clustered computer system while a current protocol for the member is waiting on a resource, the program further configured to output protocol status information in response to receipt of the query message.

#### C. REFERENCE

The sole reference relied upon by the Examiner as evidence in rejecting the claims on appeal is as follows:

Murphy US 6,138,251 Oct. 24, 2000

#### D. REJECTION

The Examiner entered the following rejection which is before us for review:

Claims 1-26 are rejected under 35 U.S.C. § 102(e) as being anticipated by Murphy.

#### II. FINDINGS OF FACT

The following findings of fact (FF) are supported by a preponderance of the evidence.

#### Specification

1a. The specification discloses that "'[c]lustering' generally refers to a computer system organization where multiple computers, or nodes, are networked together to cooperatively perform computer tasks." (Spec. 1, Il. 10-12.)

### Murphy

- 2a. Murphy discloses that "[t]he distributed system includes independent computing nodes that are interconnected via a communications link." (Col. 1, II. 42-43.)
- 2b. Murphy discloses that "[a] server node can send to one or more client nodes references to its objects. A client node once having obtained an object reference can send the object reference to another node." (Col. 1, 11. 47-50.)

#### III. PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 102, "[a] single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation." *Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1375 (Fed. Cir. 2005) (citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565 (Fed. Cir. 1992)). "Anticipation of a patent claim requires a finding that the claim at issue 'reads on' a prior art reference." *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346 (Fed Cir. 1999). "In other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art." *Id.* (internal citations omitted).

"The legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope." *In re Warmerdam*, 33 F.3d 1354, 1361 (Fed. Cir. 1994) (citing *Amgen Inc. v. Chugai Pharmaceutical Co. Ltd.*, 927 F.2d 1200, 1217 (Fed. Cir.1991)). "[T]he definiteness of the language employed must be analyzed — not in a vacuum, but always in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art." *In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971).

A rejection should not be based on "speculations and assumptions." *In re Steele*, 305 F.2d 859, 862 (CCPA 1962). "All words in a claim must be considered in judging the patentability of that claim against the prior art. If

no reasonably definite meaning can be ascribed to certain terms in the claim, the subject matter does not become obvious—the claim becomes indefinite." *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970).

"A transitory, propagating signal is not a 'process, machine, manufacture, or composition of matter.' Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101." *In re Nuijten*, 500 F.3d 1346, 1357 (Fed. Cir. 2007), "If a claim covers material not found in any of the four statutory categories, that claim falls outside the plainly expressed scope of § 101 even if the subject matter is otherwise new and useful." *Id.* at 1354, *reh'g en banc denied*, 515 F.3d 1361 (Fed. Cir. 2008), *cert. denied*, \_\_U.S. \_\_, 127 S. Ct. 70 (2008).

#### IV. ANALYSIS

#### Common Feature In Claims 1-24

Claim 1 recites, *inter alia*, "a peer protocol within each of a plurality of members collectively managed as a group by a clustered computer system." Independent claims 14, 22, and 23 recite similar limitations. Thus, the scope of each of independent claims 1, 14, 22, and 23 includes "a plurality of members that are collectively managed as a group by a clustered computer system," and "a peer protocol." The "peer protocol" is, specifically, of the type wherein each member of the group receives a message associated with the peer protocol and returns an acknowledgement in association with locally processing the peer protocol.

As Claim 25 does not include the peer protocol limitation, claims 25-26 will be addressed separately.

#### The Anticipation Rejection

We now consider the Examiner's rejection of the claims under 35 U.S.C. § 102(e) as being anticipated by Murphy.

#### Claims 1-24

Appellant contends that "[t]here is nothing in the passage, or elsewhere in the reference, that discusses the concept of a group of collectively managed member jobs running on different nodes of a clustered computer system" (App. Br. 12), nor any disclosure of the claimed "peer protocol" (id. at 13).

The Examiner found that "Murphy teaches a clustered computer system managing a plurality of nodes" (Ans. 10.), and describes the peer protocol as claimed (*id.* at 3).

Issue: Has Appellant shown that the Examiner erred in finding that Murphy discloses a peer protocol, as claimed, within each of a plurality of members that are collectively managed as a group by a clustered computer system?

While we agree with the Examiner that Murphy discloses a clustered computer system (FF 2a) consistent with Appellant's definition of a clustered computer system (FF 1a), the Examiner has not established and we do not readily find where Murphy discloses that such a clustered computer system is configured into a plurality of members collectively managed as a group. Instead, Murphy appears to rely upon the entire clustered system itself as a whole in managing its objects. However, the Examiner has not

identified within such a clustered system a managed group of members that initiates a peer protocol type arrangement as set forth in independent claims 1, 14, 22, and 23. Without such detail, we would be left to speculate. The claimed invention, as set forth in independent claims 1, 14, 22, and 23, for example, requires tracking protocol progress within at least one member of the group. We decline to speculate as to which nodes in Murphy the Examiner intended to make up the claimed peer protocol initiated managed group.

Furthermore, while the Examiner has understandably looked to Appellant's Specification so as to define the claimed "peer protocol," we find that the Examiner has both mischaracterized such a definition and has further ignored claimed limitations amplifying the claimed phrase.

For example, Appellant's Specification discloses that protocols are requests for operations to be performed *by members of a group* (FF 1a). In addition, claim 1 recites that "the peer type protocol is of the type wherein each member of the group receives a message associated with the peer protocol and returns an acknowledgment." As such, Appellant's "peer protocol" is utilized within a group setting whereby each member of the group receives a message and sends an acknowledgment.

Not only has the Examiner not identified "members of a group" in Murphy, but the Examiner also has not identified a peer protocol in that each member of a group receives messages and transmits acknowledgments, as set forth in claims 1, 14, 22, and 23. Instead, Murphy discloses that a server node can send to one or more client nodes a message. Once the client node

in Murphy has obtained the message it can send the message to another node. (FF 2b.)

The Examiner indicates (Ans. 3) that Murphy describes the claimed peer protocol in material at columns 1, 3, 4, 6, and 7 of Murphy. The most relevant portion appears to be column 7, line 43 through column 7, line 8 of the reference, which refers to Figure 2D of Murphy. If we assume the nodes shown in Figure 2D are part of a "managed group," the rejection fails to show how each member of the group receives a message associated with the peer protocol *and returns an acknowledgement* in association with locally processing the peer protocol. The only "acknowledgement" (ACK) message appears to be generated by the Server Node and sent to Client Node B.

Again, because we must speculate as to what is the managed group in a Murphy, it follows that we can not say with certainty if the defined peer protocol type arrangement is being met in Murphy.

Since we agree with at least one of the arguments advanced by Appellant, we need not reach the merits of Appellant's other arguments regarding claims 1-24. It follows that Appellant has shown that the Examiner erred in finding that Murphy renders claims 1-24 unpatentable.

Thus, Appellant has persuaded us of error in the Examiner's conclusion of anticipation for representative claim 1. Therefore, we reverse the Examiner's § 102 rejection of independent claim 1 and of claims 2-24 which stand therewith.

#### Claim 25

Appellant contends that "there is nothing in the passage that addresses the concept of monitoring for receipt of a query while waiting on a resource." (App. Br. 16.)

The Examiner rejects claim 25 under 35 U.S.C. 102(e) as being anticipated by Murphy. We note that where a claim (and its terms) are so indefinite that "considerable speculation as to meaning of the terms employed and assumptions as to the scope of such claims" is needed, a rejection (under § 102(e)) is likely imprudent. *See In re Steele*, 305 F.2d 859,862 (CCPA 1962) (holding that the Examiner and the board were wrong in relying on what at best were speculative assumptions as to the meaning of the claims and basing a rejection under 35 U.S.C. § 103 thereon.)

In the instant appealed claim 25, we find that we need to speculate as to the meaning the phrase "while a current protocol for the member is waiting on a resource" in order to reach a decision on the patentability of the claimed subject matter in view of the applied art – thus, this rejection is imprudent.

Accordingly, we are constrained to reverse, *pro forma*, the Examiner's rejections of claims 25-26 under 35 U.S.C. § 102(e). We hasten to add that this is a procedural reversal rather than one based upon the merits of and the section 102 rejection.

#### V. NEW GROUNDS OF REJECTION

We enter the following new grounds of rejection:

and

- (a) claims 25 and 26 under 35 U.S.C. 112, second paragraph;
  - (b) claims 23 and 24 under 35 U.S.C. § 101.

#### Claims 25 and 26

Claim 25 recites in relevant part, "the program configured to monitor for receipt of a query message . . . while a current protocol for the member is waiting on a resource." It is unclear from the aforementioned claim language how "a protocol waits on a resource." For this reason, our analysis of this claim leaves us in a quandary as to what it is specifying. Speculations and assumptions would be required to decide the meaning of the terms employed therein and the scope of claim 25. Therefore, it is our view that claim 25 is indefinite because if fails to particularly point out and distinctly claim the subject matter which Appellant's regard as the invention.

Dependent claim 26 is rejected for incorporating the same deficiency as claim 25

#### Claims 23 and 24

Claim 23 is directed to "[a] program product, comprising . . . a signal bearing medium bearing the program." (Claim 23 *supra*.)

We find that Appellant's recited "signal bearing medium" expressly implicates carrier waves and signals. That said, the issue, quite simply, is whether the signal bearing medium is statutory subject matter. It is now clear that a "signal" cannot be patentable subject matter. See In re Nuijten, 500 F.3d 1346, 1354 (Fed. Cir. 2007). Thus, Appellant's "signal bearing

medium" cannot be patentable subject matter because it is not within any of the four categories.

For the above reasons, we find that claims 23 and 24 recites nonstatutory subject matter.

#### 37 C.F.R. § 41.50(b)

37 C.F.R. § 41.50(b) provides that, "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that the Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of proceedings (37 C.F.R. § 1.197 (b) as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner ...
- (2) Request rehearing. Request that the proceeding be reheard under 37 C.F.R. § 41.52 by the Board upon the same record ...

#### VI. CONCLUSIONS

We conclude that Appellant has shown that the Examiner erred in rejecting claims 1-26.

Since we have entered a new ground of rejection against claims 23-26, our decision is not a final agency action.

Appeal 2008-005207 Application 09/732,189

## VII. DECISION

In view of the foregoing discussion, we reverse the Examiner's rejection of claims 1-26 under 35 U.S.C. 102(e).

We have entered a new ground of rejection against claims 23-26 under 37 C.F.R. § 41.50 (b).

REVERSED 37 C.F.R. § 41.50(b)

msc

WOOD, HERRON & EVANS, L.L.P. (IBM) 2700 CAREW TOWER 441 VINE STREET CINCINNATI OH 45202